Application No. 10/673,200   Docket No.: 0941-1876PUS1
Amendment dated June 4, 2007
Reply to Office Action of January 4, 2007

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An ~~effective number of gray levels~~ image detection apparatus ~~is to determine~~ for determining an ~~the~~ effective number of gray levels of a display while showing motion images, ~~which detection apparatus~~ comprising:

an image generation means for generating a still image and ~~its~~ a moving image, the moving image being a duplication of the still image ~~but~~ with adjustable motion vectors, and ~~then~~ for providing an interested display to show the ~~above mentioned two images~~ still image and the moving image at the same ~~time;~~ time, wherein the still image ~~can present~~ presents the gray level capability of the display while showing still images; and

an examination means for ~~determine~~ using the moving image to determine the effective number of gray levels of the display while showing ~~motion~~ moving images ~~from the above mentioned motion image~~.

2. (Currently Amended) The apparatus ~~as~~ of claim 1, wherein ~~said~~ the gray levels of the still image are adjustable.

3. (Currently Amended) The apparatus ~~as~~ of claim 1, wherein ~~said~~ the ~~motion image is the duplication of the said still image but with~~ adjustable motion vectors include moving speed and direction.

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4. (Currently Amended) The apparatus ~~as~~ of claim 3, wherein ~~said~~ the moving speed and direction ~~of the moving image~~ can be either automatically or manually adjusted ~~or by manually operated~~.

5. (Currently Amended) The apparatus ~~as~~ of claim 1, wherein ~~said~~ the ~~examined~~ examination means ~~can be~~ is either ~~real~~ a human ~~eyes~~ eye or a human ~~eyes~~ eye simulator which simulates the detection behaviors of ~~real~~ the human ~~eyes~~ eye.

6. (Currently Amended) A ~~effective number of gray levels~~ detection apparatus ~~is to determine~~ for determining an ~~the~~ effective number of gray levels of a display while showing motion images, ~~which detection apparatus~~ comprising:

a visual simulator for simulating visual detection and recognition; ~~and~~

an image generation means for generating a still image and a moving image, the moving image being a ~~its~~ duplication of the still image ~~but with~~ with adjustable motion vectors, and ~~then~~ for providing an interested display to show the ~~above-mentioned two images~~ still image and the moving image at the same ~~time;~~ time, wherein the still image ~~can present~~ presents the gray level capability of the display while showing still images; and

an examination means for ~~determine~~ using the moving image to determine the gray level capability of the display while showing ~~motion~~ moving images ~~from the above-mentioned motion image which is a duplication of the still image~~.

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7. (Currently Amended) The apparatus ~~as~~ of claim 6, wherein ~~said~~ the visual simulator ~~can be~~ is either a specified apparatus or a computer system with at least one human ~~eyes~~ eye simulation ~~programs~~program.

8. (Currently Amended) The apparatus ~~as~~ of claim 6, wherein ~~said~~ the gray levels of the still image are adjustable.

9. (Currently Amended) The apparatus ~~as~~ of claim 6, wherein ~~said~~ the ~~motion image is the duplication of the said still image but with~~ adjustable motion vectors include moving speed and direction.

10. (Currently Amended) The apparatus ~~as~~ of claim 9, wherein ~~said~~ the moving speed and direction ~~of the moving image~~ can be either automatically or manually adjusted ~~or by manually operated~~.

11. (Currently Amended) ~~An effective number of gray levels detection~~ A method ~~is to determine~~ for determining an ~~the~~ effective number of gray levels of a display while showing motion images, ~~which detection method~~ comprising:

~~Generating~~ generating a still image and a moving image by an image generating means, the moving image being a ~~its~~ duplication ~~but~~ of the still image with adjustable moving speed and direction, ~~the duplication is referred as a motion image hereinafter, by an image generating means first, and then~~;

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showing the images still image and the moving image on the a screen;

adjusting the moving speed and direction of the moving image; and

determining the discrimination of adjacent gray levels of the moving image.

12. (Currently Amended) The method as of claim 11, wherein said the number of gray

levels of a the display while showing moving images is not lost if the edge of adjacent gray

levels of the moving image can be discriminated.

13. (Currently Amended) The method as of claim 11, wherein said the number of gray

levels of a display while showing moving images is lost if the edge of adjacent gray levels of the

moving image can not cannot be discriminated.

14. (Currently Amended) The method as of claim 11, wherein said the gray levels,

moving speed, and moving direction are adjustable for detecting the gray level capability of the

display while showing different moving pictures.

15. (Currently Amended) The method as of claim 11, wherein said at least one of the gray

levels, moving speed, and direction of the still image and the moving image can be are either

automatically or manually adjusted or by manually operated.